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INCREASING 4TH GRADE STUDENT
ENGAGEMENT THROUGH TECHNOLOGY AND OTHER STRATEGIES

by

Brennan Dickinsen

A capstone submitted in partial fulfillment of the
requirements for the degree of Master of Arts in Education.

Hamline University

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Capstone Project Facilitator: Trish Harvey

Content Expert: Courtney Loynachan

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CHAPTER ONE

Introduction

Overview

For my capstone project, I will be focusing on how technology and other strategies can increase overall student engagement within multiple language arts lessons. How I will pose this question will be: *how do technology and other strategies increase student engagement?* Over the years I have thought about this question and find it very valuable when trying to get the most out of each student on a daily basis. I think there are things that I can change in my own teaching to increase engagement, as well as new methods or ideas that will help motivate students to be engaged during these longer, more independent work times. This can help my students in many other areas of the school day as well. Maybe it is a certain choice I give students during those times or a decision to change the pace or style of the way I teach. Is there a better way to utilize technology during those times? These are the questions that will help determine what will be successful.

Personal and Professional Experience

Student engagement can look very different depending on the student and/or the way they participate. As I dive deeper into this topic, I know there are multiple variables that come into play when I think about my students. Many students have different home environments. Some student families are very engaged and will do anything to get the most for their child. Others are not as active with their child because of work or personal

family reasons. Regardless of a student's home life, it is my job to get the most out of each student and to challenge them outside of their comfort zone.

Rationale for my Capstone Project

When thinking about this capstone paper teachers always need to be considerate of who is being researched and how it is being conducted. This was on my mind during the decision of what I was going to pick for a research topic. On one hand, I thought about a social-emotional focus and getting students to take multiple surveys while being studied over a duration of time. This would include getting parents to sign off on waivers for their child to have this personal data collected and analyzed. I would be diving deeper into their own personal lives to figure out who they are and what has influenced them to this point of their lives. Collaboration between parents, students and I would need to be constant for a period of time for the timing of the surveys. This led me to go the route of a research project and not worrying about getting permission to collect data from my students.

After debating and thinking over the details on this subject, I leaned more to student engagement during some of my students' tougher subjects in reading and writing, including transitions. I really think the social-emotional piece is very important, but the overall student engagement piece really fits well for my class and what my focus will be on. The SEL side can factor in student engagement as well, but I wanted to take a broader approach to student learning and not just social-emotional learning.

Background of Teaching

The background of this question has built over the last 3-4 years. I have taught at the elementary level, grades 4 and 5, for six years and ever since my first-year, class management and student engagement have been top priorities for me. I am currently a 4th-grade teacher at an elementary school in the western suburbs of Minnesota. Coming out of college, I felt good about the curriculum, the student relationships, and other odds and ends that come along with teaching. You do not really know what it is like to manage a classroom and to daily engage students with school content until you are in it. It is a challenge. Every student is different and has unique needs. There will be similar needs from year to year, but finding the right balance for each particular student and class over the years can be tricky.

When I reflect back on my classes over the past three to four years I think about how I can make lessons more engaging for students and what are some barriers that get in the way for them. For example, during a math lesson, I had a group of 28 students ranging from single percentile to the high 80's when it came to Northwest Evaluation Association or NWEA scores. The ability and engagement in that room were fascinating, and frustrating, on how students all within a year age difference could be so far apart when it comes to engaging in a math lesson. Of course, many factors or variables come into effect. How much do they like math to begin with? Are they confused or bored? Who are they sitting by? What is their home environment like? Did they get enough sleep or eat well that day? So many variables, but I felt when students felt cared for and important that was a strong first step. After a few months of whole group teaching and

doing my best to reach as many students as possible, things needed to change. It did not work to teach everyone at the same pace because everyone *was not* learning at the same pace. I began to investigate and try out different methods and strategies that I knew and found from other teachers. Certain ideas did work. Breaking into math stations for periods of the class worked for a short period. Using technology and educational board games or flashcards did as well. Seating arrangements, student choice, and music all had some positive impact, but only for a certain duration of time depending on the class that year. Over the years, I would just add to my tool kit of teacher resources and usually, it worked. Then there are certain classes or students that very little seems to work, for whatever reason.

Another part of this capstone that I hope to get more information out of is the feedback from the students. Not only just trying different strategies along with technology, but why a method was successful or was not successful for a particular group of students? I plan to work a survey into my project from my students over time to see what thoughts they had on this experience. For example, did the majority of students like the iPad being used during a certain reading lesson compared to paper and pencil? Why? Did the overall engagement really seem to increase? And the most important reason, did the students understand and retain the information the next day and beyond?

When I reflect about my past experiences with technology, I usually think about positive situations during instruction in the classroom with students. Of course, with 9-10 year olds there will be a learning curve, but with a strong foundation along with expectations, they are more than capable of learning and getting the job done. I believe it

also makes a difference with the knowledge and familiarity the instructor has using technology as well. In many cases, the students can help out the teacher with newer or more modern techniques with technology. A study by Breeland in 2002 from Valdosta State University conducted a study of nearly 200 middle school students and their use of interactive whiteboards for increased student engagement. His results came back around a 3.5 out of 4 in a survey from how the students felt they enjoyed the technology along with they felt that using this technology would better prepare them for real opportunities in the job world when they graduated. With the addition of technology, students felt an increase in confidence and enjoyed the learning process more than they did without the addition of technology.

This makes a connection with what students during this time period and beyond with teaching in the modern classroom looks and feels like. These students were born in the early 2000s, during the boom of iPhones and iPads. They are familiar and enjoy working with screens and technology. Our students in 2020 are more virtually connected than ever before. This can be by phone, computer or video games. All students in today's classrooms are familiar with technology and it is increasing each year. Of course, we keep getting more educated on how long and how much students should be looking at a screen, but most studies show that for academic purposes the amount can be longer than just "free play". So when the studies come back that students find lessons more engaging and fun with technology we should not fight it, but adapt around it.

Speaking of the year 2020, I am currently at a spot in our education that is unprecedented and never been challenged like we are now. Schools across the world are

being forced to utilize technology unlike before in this capacity because of Coronavirus and online learning. I used all the knowledge and technology skills that I have learned over the years, along with some new ideas, to educate my 4th grade students from outside their regular school classroom.

Here is some background highlighting my experience with my 4th grade students and technology. Our learning environment was fortunate enough to have a classroom set of iPads for my students to use throughout the year. They were never taken home, until mid March, so those certain expectations were never really practiced. We had a week to practice taking them home before our schools were shut down, so that did help a little. Over the course of the school year, students did use the iPad daily for around 30 min to an hour per day. This included completing and submitting online assignments and PDF files, reading books or articles, typing and researching papers, IXL for reading and math, sharing FlipGrid videos of lessons completed to name most.

This unique situation will allow me to experience first hand to see how my students are learning compared to a typical in school lesson, with some conferences and face to face time on our screens integrated as well. Student engagement is going to be challenged unlike any other time that I have been an educator.

All of my strategies along with technology were important and uniquely utilized to my students to get the most out of the 2020 school year. Looking back and how I saw students balance the increased independence they had with their iPad at home and their regular teacher not being around to keep an eye on them was interesting, but not shocking. How their internal and external relationships grew or weakened without having

the person to person interactions on a daily basis? Their typical classroom environment and routine was different so the challenge was how do we get that as similar as possible? The “student choices” were higher than ever. For example, “Should I work on my assignments or play video games?” These are all real questions that happened and it didn’t go very well overall in the long run. I can then use that experience for the next time a “similar” situation (hope not to this extent) arises.

I really think this topic is important and a foundation for student learning. How much and how long students are engaged will increase their chances of learning the content and having success with it. Especially nowadays with the amount of screen time, social media, high anxiety, ADHD and mental illnesses, students are overloaded with stimuli that the daily classroom might not always hold their attention evenly (Lathbury, 2010). Using active learning with student choices both can help, but what else is out there for students to be more engaged for a longer period in class. Even some really active and student-led projects can fall short for students and be engaged in class.

I have had these same discussions with my colleagues from multiple grade levels and teachers from different schools. How can we find ways to motivate students for a longer period of time? I feel like this will benefit the students in so many ways in my classroom and my colleagues when our classes switch for other subjects at school. These strategies could help the child benefit in other areas of their life as well outside of school hours.

My question and goal is *how do technology and other strategies increase student engagement?* I feel it will increase it, but for how long? What went well and what could

have been better? Why did this scenario happen and what can I do next time so it runs smoother? Filming my class, surveys and just what I see on a day to day basis will be a good baseline for where my class is on an overall engagement level. I am really excited to see what I learn and what works well for my class.

After teaching 4th and 5th graders over the past six years, I have observed and collected a decent sample size of what the typical engagement stamina is for that age of the student. There are many ways to focus on student engagement and it is such a wide variety. My focus is going to be on how and what strategies work best to get students, particularly upper elementary students, engaged in the classroom. Student engagement can be defined as a psychological investment in learning. It is a degree of attention, curiosity, interest, optimism and passion a student has for learning or being taught. Each subject has its strengths and weaknesses during the course of the school year, but it seems that 4th-grade students overall have had trouble focusing and staying engaged during language arts instruction.

Summary

This chapter focused on my overall research question about how technology and other strategies increase student engagement. Elementary students in the modern classroom have a passion and familiarity for technology. We want to use that motivation in a positive manner for students to be successful and prepared for their future careers. In this chapter, I explained why I feel that engaging students to their highest potential is important and share examples and stories on where and why I got to this research question.

Moving ahead I will be conducting a literature review in my next chapter. My research yielded many strategies that can be used to support students to be more engaged in the classroom. This aided my project in the investigation of how different methods and strategies can be integrated into the classroom for a stronger and more engaged lesson at the fourth-grade level. In Chapter Three, I will describe this project and how I used the information learned to create a curriculum of lessons to use in the classroom. Finally, in Chapter Four, I will reflect on my experience researching and designing this curriculum project.

CHAPTER TWO

Literature Review

Overview

When I reflected back and thought about what I do to make students be more engaged in their lessons a few things came to mind. This question kept arising, so after talking with other colleagues and doing a little research, this led me to where I am now. Of course, this is the unique challenge with teaching, there is no “one-size-fits-all” strategy that has led me to explore this research question. I knew there would be many variables that came into play when studying student engagement. How technology and other strategies will increase student engagement, brings a lot of interest for me. A significant factor that comes up is that each student is different and has unique needs when it comes to reading and writing. A collective mixture of strategies that occasionally work for some students, may work for other students under different variables. Some students are really independent and can pick up the objective the first time. Others need multiple reminders and are easily distracted. Some students are more auditory compared to visual learners and that needs to be considered when choosing what works best for my students (Gardner, & Hatch, 1989) What will be the best way to give feedback to my students on how their work habits and engagement is going? It really comes down to knowing what your students’ needs are and how I can accommodate those as best as possible while keeping the class moving. This will be addressed with multiple student engagement strategies in this chapter. For example how to use technology and other interactive strategies, constructivism and collaboration, how students learn, interactive

whiteboards and iPads, student to teacher relationships, classroom climate, how to incorporate music into the classroom, student choice, and flexible seating.

Technology and Interactive Strategies

Technology opens the door for so many options for students to engage and learn outside of the classroom. These articles focus on how using technology at school or flipped lessons at home can help students learn in a different and hopefully a more effective way. Technology has a unique way to empower students and share ideas to fellow students to explore new knowledge for their personal learning. Having access to unlimited information and the ability to share that research is growing and bringing students together.

Constructivism and Collaboration

Great ideas and plans come together through hard work and collaborating with coworkers over time. We are more connected and collaborate more than we ever have in the past. Over the years, research and surveys have shown that teacher lectures and joining in seminars that require students or even other educators to sit and listen for a long period of time has changed (Barnett & Coate, 2005). Years ago lectures from an hour to multiple throughout the day were common and there were many that students or staff needed to be at. This was a popular way to gain information from professors or colleagues. Nowadays there are more options listening to online seminars, podcasts or online classes to soak up that information. We are more aware of students coming into our classrooms with different ranges of backgrounds and skill sets. Students have experience with technology and want it to be a part of their daily engagement (Franklin &

Van Harmelen, 2007; Oblinger & Oblinger, 2005). Rather than fight this trend, teachers are finding ways to adapt and engage students.

Education has also been undergoing a paradigm shift moving away from teaching-as-instruction towards student-centred learning (Jonassen, 1993; Ramsden, 1992). As a consequence, curricula have been increasingly designed around learning outcomes rather than content (Lin & Hsieh, 2001). Focusing on individual learning outcomes has highlighted the role of different styles of learning (Kolb, 1984). This has necessitated college professors to review both the mode of delivery (instructive, participative, reflective, etc.) and the form of assessment given to students, e.g. individual or group.

When we look at how students learn there are a few different theories, including constructivist and collaborative models. Alavi, who wrote about computer-mediated collaborative learning in 1994 suggested that three factors are needed to promote effective learning: “active learning and knowledge construction, cooperation and teamwork in learning, and problem solving”. Both of these models, constructivist and collaborative learning, incorporate these factors but with different pedagogical emphasis.

In the constructivist model, people learn best by actively constructing their own learning: students are presented with opportunities to build on prior knowledge and understanding in order to construct new knowledge and understanding. To be successful this model requires learner-centered instruction: educational materials need to be provided that helps the student to discover things for themselves rather than via passive tuition (Lin & Hsieh, 2001). This model can be broken down in four steps. First, all

knowledge is constructed through a process of reflective abstraction. Next is the cognitive structures within the learner facilitate the process of learning. Another is the cognitive structures in individuals are in a process of constant development. Lastly, if the notion of constructivist learning is accepted, then the methods of learning and teaching must agree. O'Loughlin (1992) believed that for knowledge construction to happen students are to think outside the box. Be inventive, try out new hypotheses, and explore possibilities and present the best solution they can come up with.

Cooperative or collaborative learning is more hands-on and with a team. There are projects to be built along with discussions and team accountability. According to Lin and Hsieh (2001), the learning happens during this method when students are collaborating and sharing ideas or thoughts to grow their understanding. This is different from constructivism because the learning is not just researched or found, it is shared. The more information that is shared the more learning will serve as the outcome. Learners have prior knowledge of a topic and student participation is key for this method to be successful.

There are a number of benefits when it comes to collaborative learning. Georgia Lazakidou (2010) believed these are increasing student involvement with the subject matter, enhance critical thinking skills, promote problem-solving skills between students, and encourage student achievement and learning.

This fits well with my capstone project for a few reasons. Students are changing the way they learn everyday. The more and more we can adapt to how students learn and find ways to increase their engagement, we will find more success in the classroom.

Student Learning

According to Breenald (2002), there are three modalities of learning. The first is visual learning. This includes being able to search and share information on the internet, handwrite or type information on the board, and share pictures or videos that you or students create. Visuals promote a student's ability to process and organize information (McKendrick & Bowden, 1999). This can also lead to higher level thinking because of the challenge that the visual presents to the student (Smith & Blankinship, 2000). This is very important to tap into and understand how students in today's classroom are learning. Visual and auditory learning along with how parents and teachers are motivated and involved in a child's learning are vital for a student's educational achievements.

The second is auditory learning, which includes activities that can read orally the sounds of words, speeches, and poems. This can also include books, music and documentaries. The third piece of the modality learning is tactile. Being able for students to personally and physically interact with the board can help students that are more tactile learners (Breeland, 2002). The engagement piece is strong, especially for the younger grades in elementary. A downside is that only one student or teacher can write on it at once. This can lead to more wait time for other students or being uncomfortable writing in front of their peers.

Breeland (2002) shared some insight about this as well. He continues that student engagement is crucial for student motivation during the learning process. Parent involvement, teacher motivation and skills, and effective use of technology are all factors that help engage students in learning. Technology provides opportunities for teachers to

meet the needs of students with various learning styles through the use of multiple media (Bryant & Hunton, 2000).

These methods of student learning are very important and play a big role when focusing on student engagement in my project. I have included multiple strategies that will fall into these learning styles for students. For example music for auditory learners, technology for visual learners and building relationships and classroom climate to help bridge the parent to teacher and teacher motivation for student success.

Interactive Whiteboards and iPads

One form of technology that hit a strong popular streak was in the early 2000's with interactive whiteboards. These are SMART whiteboards that students can write and move words, numbers and pictures to help educate and interact. The ability to write, share and surf the web all on this screen while students could see and interact was great. The one big downfall was that this was one board and with multiple students in the room it wasn't always easy for each student to be engaged.

Another transformative device that has been integrated in the classroom is the iPad. The iPad was first introduced in 2010 and has been researched and investigated by many professionals and educators about its use in education. Overall feedback was optimistic and positive, but students did not really feel there was much more improved learning happening in the classroom. Another initiative happened in a US graduate management program. Hall and Smith (2011) described it as while learning outcomes were not significantly improved, student convenience and flexibility were enhanced, along with aspects of environmental sustainability. A third study provided feedback about

an exam in Canada (Hall & Smith, 2011). Even though the students enjoyed the idea of using the iPad and saving a significant amount of paper resources, students still felt uneasy about the extra stress it could cause while grading and submitting as well as unreliable internet.

On the other hand, Mango (2015) reported increased retention and performance in mathematics with students using a tablet. A few reasons being that students could research content and videos from the internet and find audio files of instructors reteaching the content. This can lead to deeper understanding and practice in or outside of the common classroom. Extended directions or examples that could not be shared with just a piece of paper. This has been proven not only in the United States, but in other countries all over the world. We are seeing an increase with 1:1 iPads in classrooms and it looks like they are here to stay.

As our society becomes more and more driven with technology, education will be right alongside it. Ever since I can remember stepping into a school in the mid 90s, computers and technology have played a role in education. From the early Apple computers with a floppy disk to the touch screen iPads we are using now, schools continue to find any way to help engage students.

Technology is such an amazing tool for students to have access to in the classroom. It opens so many opportunities for students to ask questions and search to find answers. In my project students will be using technology to help communicate their thoughts and ideas with me and their peers. They will also be using multiple websites to help gain more knowledge about the task at hand.

Student-Teacher Relationships

There are many different ways to interact and motivate students. As teachers, we are in constant practice working with children to build those relationships. Students' home environments are all unique in certain situations so the first step is to build a positive and safe relationship with the child to help in any way we can.

Building strong relationships between parents, teachers and students is one of the first steps in having a successful school year (Finn,1989). Teachers need to set the expectations for the students, while the parents and teachers work together for the common well being of the student. Student engagement is not all about academics. Research has been conducted about school completion compared to dropout rates because of student engagement. The Participation–Identification Model, created by Finn (1989) was a theory set up by crucial variables for students to be engaged and successful in school. In general, if you participated and had some successes or feeling of accomplishment you would more than likely complete school and graduate.

On the flip side, if you did not participate in school and had little success or connection in the classroom you would be emotionally withdrawn from school and could drop out. In other words, dropping out or completing school was not just an event in a student's life, but rather a long on-going process of disengagement in school overall. For example, Balfanz, Herzog, and Mac Iver (2007) were able to identify 60% of high school dropouts from sixth-grade attendance, misbehavior, and course failures. Similarly, robust conclusions can be drawn from the literature on classroom (Finn & Cox, 1992) and extracurricular participation (Feldman & Matjasko, 2005) and with respect to the

importance of belonging and identification (Voelkl, 2012). Finally, student engagement in high school has also been found to be related to postsecondary outcomes (Finn, 2006).

One example was set up by Finn and Rock (1997). They identified minority students from low-income backgrounds, two powerful demographic risk factors for poor outcomes in the USA, and classified them into three groups: resilient completers (higher achieving students, on track to graduate), non-resilient completers (likely to graduate but with poorer academic performance), and non completers or dropouts. The groups differed in expected ways according to a number of other demographic and social variables (percent of students living with both parents, family income, amount of schooling parents expected students to complete). After controlling for socioeconomic status and family structure, the three groups of students differed significantly in terms of teacher-rated and student self-reported engagement (attendance, working hard, paying attention in class, preparing for class/school, behavior problems). In other words, within a group of students who were demographically at risk for poor school outcomes, engagement variables significantly differentiated those who were academically successful from lower-achieving school completers and high school dropouts. Teachers reached out to these students to see if they could help bridge that learning gap. What resources or motivation did the student need? Sometimes a student just needs someone else to believe in them to help light that inner fire.

Learning is best done with people, not for them. It is most effective when learners are participants rather than recipients (Leadbeater, 2008). The main element in trying to promote learning is building relationships—teacher-pupil relationships; peer-to-peer

relationships; and children's relationships with siblings, mentors, and role models. All the traditional and high-tech resources of education—from whiteboards to the Internet and even to classrooms themselves—are best understood as different kinds of interfaces for relationships that support learning (Leadbeater, 2008). Learning also happens from students to teachers when they share ideas. When each side is open and trying to build trust the relationship continues to grow.

Authentic learning relationships and experiences can happen all the time inside or outside of the classroom. It could be on a field trip when students are learning from each other or the tour guide at a museum. A student from another class or school could have a connection or question that a different student had. Collaborating together and coming up with an explanation or solution goes above and beyond the classroom or what was originally planned (Fredricks, Filsecker, & Lawson, 2016).

A previous class of my students had an experience, similar to Junior Achievement, with an insurance company. Employees from that company came in and introduced a game students would play and use their skills and relationships with their peers to complete the task. Students were grouped with other students; they might not interact as much and build those relationships. As this was going on the employees from the insurance company were asking and answering questions from the students. Bridging that gap and providing a unique authentic learning experience that did not come from a textbook.

Building a strong relationship with my students goes such a long way when working with them. This is the foundation of what makes the student begin to trust me

with their learning. In my project, I will build strong relationships all throughout the school year like daily handshakes, talking about what they do outside of school and class skits and parties. I will be getting some good feedback on this from student surveys to see what is going well and what can be improved on.

Classroom Climate

Classroom Climate has so much to do with how successful a classroom of students can be. Each day is a different challenge, but that is where the professional techniques and strategies come into play. I like how some of these articles focus on the pedagogy side of student engagement. It is not just a teacher's job to help students learn, but to actively strengthen their capacity to learn. It lays out that there are gaps in engaging students, but there are ways to help shrink that gap.

Classroom climate can be defined as a cumulation of many students' feelings about each other and the teacher (Graham, & Gisi, 2000) It is a reflection of students' opinions of their academic experience and their struggles from class to class. How does this all fit together on a minute to minute or month to month basis? The relationships built and shared in a classroom over time is the foundation of classroom climate (Graham, & Gisi,2000) What does student A and student B think or feel about each other? How does that connect with other students or the teacher? Why is there a certain excitement or reaction when the teacher presents a certain reading lesson or instructs a certain way? How does the teacher get students to participate or be engaged during the class discussion? These are all day to day factors that play a role in the classroom climate (Graham, & Gisi, 2000)

We know that our job as teachers is to build a safe environment for students to learn, but it takes a lot more than just exposing students to information. Evelien Buyse (2008) shared her research about why it is important to build strong relationships and classroom climate. Students with problem behaviors in the classroom are at risk for developing a more confrontational and less close relationship with their peers and teachers. The study went on to share that students that felt comfortable and protected reflected a trust and respect in the relationship.

Along with that a study from Norton (2008), the association between classroom climate and students' academic performance has been well researched. If the classroom climate is strong and overall positive the students academic performance will reflect that in higher achievement. Students who feel comfortable and confident in class will be willing to take chances and be challenged in the learning environment. Classroom climate is also the best predictor of students' overall satisfaction with their college (Graham & Gisi, 2000). Instructors help develop the classroom climate and can engage in several interpersonal behaviors that contribute to a positive one (Frisby, Berger, Burchett, Herovic, & Strawser, 2014); specifically, those behaviors that build a strong rapport with students. Good rapport between instructors and students is essential to a positive classroom climate and leads to better student outcomes.

For example, Fraser and Treagust (1986) developed an inventory that helped break down and understand what all goes into classroom climate. The list they came up with was that is a little bit dated, but still ideas that we still use today:

- *Personalization*: The instructor provides opportunities for student-to-teacher interaction and expresses concern for students' welfare.
- *Involvement*: The instructor encourages active student participation in class.
- *Student cohesiveness*: Students know one another, help one another, and are friendly toward one another.
- *Satisfaction*: Students enjoy class.
- *Task orientation*: Class activities are clear and well organized.
- *Innovation*: The instructor utilizes unique teaching methods, activities, or assignments.
- *Individualization*: Students are permitted to make decisions and are treated differently based upon ability and interests. Fraser and Treagust (1986)

These all make a lot of sense and can be relatable in my own classroom. I would say every day I try to incorporate somehow those seven traits of classroom climate into my students' learning environment. I think about an example of when my students were demonstrating their comprehension on an article that they read by creating a presentation with Flip Grid. The objective was personalized to the students ability and interest. They read the article in pairs and created a short video that they enjoyed very much, on what they learned from the text. This was innovative and students were involved with their own reading as well as helping their classmates with the newer technology.

Student Choice

Giving students choices can be a great way to motivate them in the classroom and adapt to their individual learning styles. It can empower and make them feel more responsible for their learning (Kohn, 1993). When students notice that there is a choice available it begins to build trust with the teacher and the students will more than likely work harder toward that goal (Kohn, 1993).

Student choice is considered to have a similar set of benefits to those associated with personalized learning (Kohn, 1993). It is such a great way to help motivate and engage students if it is a favorite or least favorite lesson. This empowers the students and builds trust between them and the teacher, which leads to more involvement during the discussion or activity. They get to choose topics that they are passionate about and want to learn more about. Another benefit of a more personal learning structure can also help implement strategies for at-risk students. In 2014, Hanover researchers shared from their conclusions that students will experience an overall greater personal well-being if they perform high in the academic environment. Studies have found that students given a degree of choice about their learning showed improvement on standardized tests.

Kohn (1993) shared and broke down four non-academic dimensions of impact student choice. The first one is student well being. This benefit reaches into every corner of human existence, starting with our physical health and survival. Studies have shown there is a result of less stress in their everyday lives and overall health is strong. The second is student behavior and values. Students need to make the most of their experiences with choice and negotiation. Each student has different views of this, but the

sooner they understand how to handle their own behavior and how they value themselves they can get the most out of it. The third dimension is effects on teachers. Kohn mentioned a few options with this one. The first is the possibility of decreasing teacher “burnout” and the second is “freeing” the students more and not doing as much “policing” the students on what they need to accomplish. In the end, it gives students empowerment and builds trust on both sides. The last is intrinsic value. Kohn was quoted saying, “allowing people to make decisions about what happens to them is inherently preferable to controlling them...[children] are people whose current needs and rights and experiences must be taken seriously.” (Kohn, Choices for Children, pg. 6)

Student choice is a great option to use in the learning environment. In my capstone project there will be a few lessons that students have the option of what seat they want to use for the class period as well as what choice to pick from when completing an assignment. When students have options they take more ownership of their learning.

Flexible Seating

Utilizing the option of flexible seating can make a big difference in how a student is engaged in a lesson (Espey, 2008). Not only could it help a student be more connected to the task at hand, but it could also play a role in how they communicate with others, their body language and even how they feel about themselves.

According to Espey (2008), student learning may be impacted by various physical characteristics of their learning environment, not by which is the chair or seating style. In fact ergonomically correct chairs and seating styles have been found to be a really important element in the classroom environment. This is also important to keep in mind

and note because the present student population changes in terms of body shapes and sizes (Espey, 2008). Milshtein (2006) supports this idea of ergonomic correctness of the body. His data shows that when a student is sitting in their chair, only 14 percent of an individual is supported by their feet and 86 percent of their weight is supported by the chair. This is good information to keep in mind when we talk about what kind of flexible seating options we provide students.

Studies suggest sitting in fixed-type tables and chairs could affect the development of musculoskeletal disorders, poor posture, back pain, neck pain, and other health-related concerns (Thariq, Munasinghe, & Abeysekara, 2010; Milshtein, 2006). Breithecker (2006) shared that brain activity is reduced when the body becomes inactive, such as when students remain relatively motionless within traditional classrooms. Another study highlighted that incorrect computing, an activity in which sitting is common, may increase one's risk for back and neck pain and injury, resulting in missed school and work (Yildirim, Capanoglu, & Cagatay 2011).

To help prevent these issues from happening Breithecker (2006) suggested that students should engage in active-dynamic sitting. This could be using a chair that swivels or participating in any type of stimulus muscle movement that will engage and improve in blood circulation and allow pelvic and spinal shifting. Students overall attention and focus would increase and academic performance will more than likely follow.

Active learning, team-based learning, and problem-based learning are just a few examples of modern pedagogies for which classroom seating considerations are important. Research of Veltri, Banning and Davies (2006) provided that learning

environments that include furniture that is flexible for student interactions and group work strongly increase the chances of students completing the task at hand. If students are not comfortable and/or can not easily communicate with their peers it creates a barrier for learning and cooperation to take place.

Some teachers are fortunate enough to have flexible seating or a human centered design program for students to use. Schools that have these opportunities reap the benefits of student engagement and peer interactions inside and outside the classroom. When parents, teachers and students enter the modern classroom there will be a good chance there will be some type of flexible seating option. This could be the type of desk, table or standing desk for collaboration needs. Another option will be the type of seating options. From your common four legged plastic chairs to swivel stools students will have choices to pick from. Usually there is not enough for each student so those who have certain needs or an IEP could qualify first or teachers will have a plan in place for students to use. Other classrooms could have furniture that is adjustable. Moving cube style seats together to make stadium style seating or a couch like arrangement, student engagement has the potential to be very high if expectations are set Veltri, Banning and Davies (2006).

When thinking about what flexible seating looks like there are some factors to consider. One of the factors to consider is what type of room and chairs are available? This makes a difference in how you can arrange the chairs or desks and how many together. In some cases they might need to be in more rows. In other situations, grouping desks or tables in small groups works better for collaboration and connecting with peers.

The goal should be what is going to get this individual student to engage and participate in class as much as possible. What students does this certain child work well or not well with? Is this student easily distracted so maybe they should be closer in proximity to the teacher and not looking out the window? Are there students that need a body break so it could work better for the class if that child is placed toward the back of the room so they can stand up or walk around without distracting their peers as much.

Having flexible seating options can be a game changer for certain students. We see more and more options for students to use during the school day in their learning environments. In my project, there will be a lesson where students have the option to pick from our flexible seating choices. This could be from a wobble stool to just being able to work at a standing desk. It can be a long day just sitting for a young student so having options available can be a boost of energy for them.

Music

Using music in the classroom can change the way students focus and relax during work time. There are so many different genres or motivators when it comes to music. Many students enjoy music during work time so if that can be integrated in the lesson that can show some positive effects (Ritter & Ferguson, 2017).

When we think back to some of our academic memories in the classroom and why we remembered a lesson, topic or formula there might be a good chance music was involved. Schoolhouse Rock, Flocabulary, Go Noodle, and theme songs like “Bill Nye the Science Guy” were catchy and engaged students in classrooms all over for years and

still to this day. These songs are stuck and played over and over in our heads, hence why using songs to memorize definitions, rules or formulas is a useful tip.

Music is not only pleasant to hear, but also beneficial to health and well-being, which explains why it is frequently used as a therapeutic tool (Ritter & Ferguson, 2017). There is research out there proving that listening to music is a beneficial thing to do for your personal health. Certain types of music can improve your mood, decrease depression and/or stress on a day to day basis. It can also relieve pain, for surgery patients, stabilize their heart rate and blood pressure. Breathing rates can be decreased as well for those who need extra support. Others can help them consume less food, boost the immune system, help treat insomnia, increase exercise habits and improve their motivation to run and do it at a higher level. These are all good things that every person wants to add to their daily habits. (Drazen & Woods, 2003; Harmat, Takács, & Bodizs, 2008; Karageorghis et al., 2009; Trappe, 2009; Cervellin & Lippi, 2011; Snyder, Snaterse, & Donelan, 2012; Chanda & Levitin, 2013; Schäfer, Sedlmeier, Städtler, & Huron, 2013). Another recent study found that listening to “happy music” facilitates divergent thinking, which is a key element of creativity (Ritter & Ferguson, 2017). This can conclude music is not only a form of art meant for entertainment, but also a kind of healing art or a medicine for the soul and body. At the same time, music can be used for educational purposes, especially in language teaching. Teaching for English language educators can be a challenge at times to keep the interest for their students. Incorporating music and familiar songs can spark and sustain students' interest and focus for longer periods of time.

An article published by Columbia University shared six benefits that music provides in the classroom environment (Thornbury, 2006). The first benefit mentioned was it helps students concentrate and remember lessons. One perspective was provided by Thornbury (2006), “There is no learning without memory, and language learning in particular, with the enormous load of vocabulary that it requires, is largely a memory task.” (Thornbury, *An AZ of ELT*, p. 14) Successful second language learning implies that learners can memorize the studied material and call on it whenever they need it while using the language. To add on to that point a lot of authors believe that songs and music has the ability for people to increase their long-term retention of words, phrases and sequences to memorize (Mora, 2000; Abbott, 2002; Lake, 2002; Lowe, 2007; Kerekes, 2015).

Supporters of music, like Elyse M. George and Donna Coch (2001) conducted an interesting experiment of memory. Electrophysiologically, which is the measurement of the flow of ions in biological tissues from electrical recordings, musicians demonstrated faster updating of working memory in both the auditory and visual domains and musicians allocated more neural resources to auditory stimuli, showing increased sensitivity to the auditory standard/deviant difference and less effortful updating of auditory working memory. These findings demonstrate that long-term music training is related to improvements in working memory, in both the auditory and visual domains.

There are other benefits from music as well. Students can build strong hand-eye coordination and dexterity from playing an instrument. This can grow those motor skills especially significant in younger aged students. Another is being disciplined and focused

on study habits. As classes and work become challenging, students are required to create a work routine or habit at home. This takes patience and practice, which will benefit through the learning process. Teamwork skills are formed over time when playing in a band or orchestra (Silverstone, 2018). Not only focusing on what you are doing, but how that fits into the big picture. One of the most useful benefits of music education is the increased ability to process situations and find solutions mentally. Those with musical training have been found to have higher levels of grey matter volume in their brains, which are directly tied to auditory processing and comprehension. It might come as a surprise, but one of the areas music strengthens in a person's life that is very important is forming relationships. Musicians learn to listen to others, sense emotion, and react with greater depth and understanding (Silverstone, 2018).

Another is that it helps encourage students to express themselves and relate to class material on a more personal level. A third reason is it can offer an intriguing starting point for learning about topics like a historical period or piece of literature. In some cases, that I have used before as well, is using music or ringtones to represent when an activity is beginning or transitioning into something else. This gives students time to gather themselves and figure out what is next within a small time frame. There is no need for extra noise or visuals for the next task. A fourth reason for music to be involved in the classroom is the opportunity for students and teachers to build a strong relationship. When people hear music it expresses a reaction out of everyone. Some people love a song and really get into it. Others might not be as excited about it and might keep it to themselves or share that opinion. Especially when working with school age students they

appreciate any opportunity to share their thoughts and opinions. Which either side the students are on they are learning more about each other.

This reaction also goes for the teacher. In our classroom we like to have a Friday morning meeting catwalk. Students greet each other as they are choosing their dance to our morning meeting spots. The connections and laughter that happens is a great way to start the morning and to strengthen the relationships in the classroom. This ties well into the last benefit for having music in the classroom is student collaboration. As mentioned before students gravitate toward each other and share ideas more when they feel confident and comfortable. Music is an outlet for many students and they are willing to reach out and share ideas with each other.

A study conducted in *Frontiers in Neuroscience* (year) found evidence that when students listen to music in a structured classroom it can lead to improvements in language-based reasoning, short-term memory, planning and the ability to focus over a period of 18 months. Another research study conducted on 117 fourth-graders in Montreal, showed that three years of piano instruction significantly enhanced young people's self-esteem.

Rationale for the Research

Overall my thoughts on what resources I found were pleasing and exciting when the research process got started. I think I found a nice variety of levels of engagement topics that will help me learn and dive deeper into this topic as I move forward in this process. Reflecting on how I can go even further with building stronger relationships with my students. Get to know them better to really see if there is another way to motivate or

get across to them. Seeing how having the right seating options can help students focus and be engaged. This can also be a distraction, but having the right balance for the students can go further than a regular chair can. How music can help keep calm and focus in the classroom as well as retention for students. Some articles are on older students and strategies that worked for them and pre-school aged students and what their sleep patterns are like.

After doing this research it did show me that student engagement has lots of different avenues to venture. The relationships from parents to students to teachers can play a vital role. How students sleep or the amount of technology used inside or outside the classroom as an impact as well. It is nice to have such a range to pick from because each of my students are unique in their home life and learning styles. On the other hand, as I continue to move forward in this process I might need to narrow down certain ideas to fit my personality of students. That will come with experimenting and what works best.

Other than these articles I will be on the lookout for other texts that I come across as well as teachers and other professionals in this field of student engagement to make my research be as well rounded and inclusive as possible. I believe it can only help to use all the resources possible to learn more about my students and the profession to improve myself as an educator that will benefit my students.

Introduction to Chapter Three

Chapter 3 will focus on the action research methods that will be used to dive deeper in the reason for this study. The project is focused on *how do technology, music,*

flexible seating, relationships and student choice impact student engagement during the school day? This was derived from past experiences with my classes and looking for ways to better engage my students in the classroom. The research and projects will take place in a 4th grade classroom at a K-5 Elementary. Classroom sizes range in the mid to high 20's with varying ability levels. The projects created will be available for implementing in the learning environment for potential higher student engagement. Experiences and data will be collected to see what worked well and what can be altered for the most success with the current class of students.

CHAPTER THREE

Project Description

In this chapter, I created the framework of a new curriculum of lessons based on what I learned in Chapter Two. Over my young six-year teaching career, I noticed that there is inconsistency when it comes to student engagement. I wanted to find and test more strategies to help me become a better teacher and better my students' school experience. In Chapter Two, I began with summarizing how my past teaching experiences in the classroom led me to my capstone question: *how do technology and other strategies increase student engagement?* After teaching for six years in the classroom and realizing how different each class and student can be, I needed to research deeper into how I can get more students engaged at different levels.

The next section of Chapter Two broke each method or strategy down in how they can be implemented into the classroom. The first topic was technology and interactive strategies. Along with each strategy, there are various reasons why these methods would be impactful for students at different learning levels. This also included some research and data about interactive whiteboards. The next topic was on student to teacher relationships and how we can bridge that gap closer with the right focus and attention. The third topic was on the importance of a safe and strong classroom climate. Another strategy was on the flexibility and self empowerment of giving options and having student choice available for students. The last topic was on the value of having music in the classroom for focus purposes and/or transitions.

After this I will begin to explain the setting and audience for my project. This will be the basis where I will instruct the lessons and measure how well they work or if I need to make any adjustments in the future. Finally, I conclude with a timeline for completing my project.

Research Framework

Most of the articles that I used for this literature review were from multiple professionals that focus on student engagement (Breithecker, 2006; Hall & Smith, 2011; Thornbury, 2006; Silverstone, 2018). When deciding this I wanted to have a week or two of lesson plans that teachers could use when trying to find ways to motive or engage their students more in the classroom. The lessons that I chose to focus on were language arts on the topic of making inferences. The topic can obviously be replaced and the engagement strategies should work for any subject that the teacher prepares for. A typical lesson runs for about 45 minutes or so and that includes the teacher instructing as well as the time for students to work. The lesson plans that are given can be used in the whole entirety or broken up to accommodate the time available in the classroom. All of the concepts I incorporated in my literature review were formatted into lessons using the curriculum framework of Understanding by Design (Wiggins & McTighe, 2011).

Project Format

In this project, the curriculum for my student engagement lessons are designed by using the Understanding by Design model (Wiggins & McTighe, 2011). This is a three stage model set up to explain the lesson and what it all entails with details. The first stage helps pinpoint the desired results of the overall lessons. This will include the essential questions of the unit and what knowledge, skills and transfer goals are important for the student. In the second stage, the teacher will need to have a space to outline the evidence needed to show what the students have learned over the course of the lessons in the first stage (Wiggins & McTighe, 2011). This can include for example the formative and summative assessments. The third and final stage is where the educator will develop the lesson plans. This includes all the experiences and activities to help the students achieve the desired goals from stage one.

My project will follow this guideline to help set up and organize the lessons that I created. There are desired results that I want the students to reach and this will be labeled in the essential questions, knowledge, skills and transfer goals will be. Formative and Summative assessments are created to help identify and see those desired results. Finally, there will be lesson plans that will tie into these essential questions and goals that are met to be obtained. My goal is that every student will experience and really improve on their engagement during these upcoming lessons.

Setting and Audience

The lessons that I developed is for a fourth grade classroom in a suburb of a major metro area in the upper midwest. The elementary school I teach in is one of six in the

district. Each school has a regular program and an immersion program. At my school, I teach in one of two English 4th grade classrooms. According to the 2018-19 data at the Department of Education in the state where the school is located, there are 661 students at this school and it is rated one of the top elementary schools in the state. The student to licensed teacher ratio is 15:1. Only seven percent of students receive free or reduced lunch and 86% of the students are White. Thirteen percent of the student population is part of the Special Education program, while there are very few English Language Learners. Although the intended setting is a fourth grade classroom, the strategies I shared can easily be adapted to meet the needs of other grade levels. So even though my main audience would be fourth grade students, any teacher looking to incorporate more student engagement skills and strategies into their rooms could use these and change them to meet their needs.

As I have mentioned previously, I developed these strategies for students in my fourth grade classroom. This group of students usually consists of between the low to mid 20s with a wide range of abilities. Most students range in age from nine to ten years old. In the following section, I describe my curriculum project that provides strategies and methods to help engage students in the classroom.

Project Description

I created 10 various student engagement focused lessons for my fourth grade students to use. The focused subject will be language arts and more specifically on making inferences. Each lesson will have at least one student engagement strategy implemented in it.

For example, with technology, students will be engaged with a program called Pear Deck that they can share responses from their own iPad that the teacher can see from their own iPad. Additionally, the teacher has the control to share those responses to the SMARTboard. Students can then see each other's questions and answers creating excitement and discussion. During lessons, students will be engaged with short passages and videos that tie into what the lesson is about. Each student gets an opportunity to answer questions along with group or class discussions tied into it. This will give great feedback to the teacher on who and how students are interacting with the lessons and answering questions.

The classroom climate lesson will be built around students role playing in skits about making inferences. Students will have multiple days of background knowledge about this topic and will get the chance to present and have fun in front of their peers. There will be laughing while learning from each other on how to make inferences. Some questions that will come to mind are: How comfortable and safe do students feel when they are in my classroom? Do they feel like they are being challenged and can ask questions freely?

Student choice will have a few options for the students. One lesson will be set up as stations for students to work at. Each station will have a different option for students to learn about making inferences. This will help give me the chance to work with smaller groups as well as students having the independence to choose how they want to work. There is also another lesson that students will be creating a project to present to the class on what they have learned. Students will have options to pick from on how they want to

present their information. Some questions that will come up during this are: What will that look and sound like and how will that impact their learning? These observations will be documented for my reflection.

Flexible seating has options as well. Where students sit and what they are sitting on will be the two big factors. In my classroom, I have regular four legged plastic chairs, six swivel stools and six squishy cushions. To help document this I will have a simple chart that will show if the child had success with the flexible seating or not and then comments next to it why. I will rotate the different seats among the students so each of them gets a chance. This will be set up as stations for students to mix and match with other students along with different flexible seating options. The bottom line will be to see how their engagement and focus in the classroom has changed if at all with the different seating options. For some of my more active students, I will give them the option of sitting closer in proximity to me compared to the back of the room and see how that alters their focus and engagement as well.

When we start to involve music in the classroom students usually get excited. I have tried this in the past and have had pretty good success with it. My focus this time will be more intentional of what music I play and at what times of the day or lessons. In our lesson, I will be using music for transitions and during work time. Are students using this option to the fullest or is it a distraction? I will track this data over a two week period, with one day on and one day without music.

The lessons will conclude with student-teacher relationships. I will start out with a student survey to get a baseline on how they feel the classroom and the teacher

relationship is in their perspective. This option will take a little more time for true feedback so I will give it two weeks. After the lessons take place during the next few weeks I will share a post survey of how things went. What went well as for building relationships and what could have been better. This could be having more conversations with students than before. Another option is empowering the students more. This could be leading our read instead of just me. Students can socialize more with their peers in class while working. I will eat lunch and have more non school related conversations with them. We will share stories with each other about ourselves to help build that relationship. Once these two weeks are over there will be another survey for the students to fill out and see what their impressions are between each other. Which week (or type of teacher) do the students prefer and why?

Most of the assessments will be formative. During and after each lesson I will be observing what has gone well and what needs some adjustments. This will take place with note taking and talking with other students over this time period. There will also be feedback from the students. They will tell me verbally or with their body language on how successful the student engagement strategies are going. If students are having success in the classroom with little distractions that would lead to things going well. In the end there will be a pre and post student engagement survey to get a baseline of what students are thinking before and after these lessons take place.

Timeline

February 2020	Research for my capstone began
March to August	Create, review and edit of capstone
June	Work to design the lessons
July	Create and edit ten lessons for student engagement
August 3rd -7th	Capstone Presentation and submission of final work.
September 2020	The lessons are intended for use in the first semester of the upcoming school year.

Summary

In this chapter, I have described my project and how it relates to my research question, *how do technology and other strategies increase student engagement*. I have outlined the frameworks and the lessons created for my project on the previously listed professionals in my research paper. I have also discussed the setting and audience this project is intended for and my timeline for implementing it. I plan to complete the capstone project as of August of 2020. In the next chapter, I will reflect back on my capstone experience and make any adjustments for future research projects in this field.

CHAPTER FOUR

Conclusion

Overview

Throughout my six years as an elementary school teacher, I have seen many students struggle with attention or engagement problems. Every student learns a different way and works well in different environments so it can seem impossible at times to find the right tool to motivate and engage students in the classroom. After observing and experiencing this first hand, I created 10 lesson plans that can help give teachers and students some strategies and to answer my question of *how do technology and other strategies help increase student engagement?*

In this chapter, I reflect on my capstone and what I learned during the research and writing process. I will also be looking back at the literature review and making connections with my project as well as some of the sources that I used to help support this. At the end, I will explain the plan of sharing my project.

Reflection of the Capstone Process

This capstone project has challenged me to become a better researcher and writer over this time period. I have also learned many new ideas and broadened my knowledge about the education field and what has worked or not worked well for teachers. As for teaching students in the classroom, it has really made me reflect and realize what I can do to help support my students. I have always been interested and looking for ways to help engage my students and this was the perfect opportunity to take the time and research

what has gone well in the past for educators and what are some newer and upcoming ways to help as well.

Before this whole process started I was nervous and excited for it to start. I knew I wanted to attend grad school and complete my capstone. I knew it would be a challenge and difficult, but I didn't totally get it until it began. The amount of research and length to this capstone project is new territory for me. As an undergraduate my longest paper was probably around 16 pages or so. The amount of preparation and work that goes into this is hard, but rewarding in the end. I found out that organizing your time and planning this out can really benefit and make things run smoother overall. As for the research part, being able to work through the Bush Library as well as other online resources and scholarly articles was very educating, but cumbersome at the same time. There is lots of research on student engagement so figuring out what fits best with my capstone project took some time.

This also challenged me as a writer. As mentioned before I have written many papers through high school and college, but this was a lot more particular and challenging overall. As an elementary teacher myself I help students begin to write some of their first research papers and going through that process is one thing compared to this. I can take away some tips that will benefit and enlighten my students as well as it did for me. Going back to understanding the due dates and having a plan for this large project was important. Chunking it out made it more reasonable than looking at the whole paper at once. Sometimes I found myself just getting ideas down on paper and then going back to see what fits better or how I can change things up.

There was also a lot that I learned about what helps engage students. Students are very tech savvy overall and for the most part really like using an iPad or game to help them learn. This is evident in the previous research given as well as what I have experienced in person as a teacher. Another thing that I learned was the excitement and engagement that flexible seating brings to students. I observed this a lot in the classroom with wobble stools, benches, squishy seats and standing desks. There had to be a schedule created so there would be an appropriate balance of who got to utilize each option. The research also backed this up with even having the necessary support for students' bodies for classroom work. A third strategy that I learned more about its success is how to implement music into the classroom. Everyone loves music in some form or fashion and students are the same way. They build a connection with each other during music and can help them focus when utilized correctly. Research also proved how it can help decrease depression as well as increase students' memory and focus.

The last thing I would say about this project, would be the support and resources available to help make this process a little bit easier and give me confidence to do it. The professors that I have been fortunate enough to learn and take guidance from really helped make this all possible. As a student, I have the starting idea and broad plan of how I think this will work, but having the experts and experience background of these professors to help with questions or planning the outline really is great to have. As a teacher myself, I can partly see what they are going through, but doing this at a graduate level and the amount of time and effort it takes to help all of their students is an amazing job. I want to say thanks and know that your support and ideas do not go unnoticed.

Literature Review Connections

As I found out during this literature review, there are many articles and websites that share information about student engagement. Each source had its importance and role in this literature review, but a few had more of an influence than the others. One that comes up that really focuses on the how students learn is Breeland (2002). His motive was to show how students can learn in three different styles: visual, auditory and tactile. Being able to use one of these, if not more, could help reach more students in a single setting and give them a higher chance of being successful because of it. For student to teacher relationships, Leadbeater (2008) provided solid facts about why building those strong relationships go such a long way, even past the classroom. He went on to say how important our person to person interactions and conversions can go compared to virtual ones. Another big influencer in student engagement in the music form is Ritter and Ferguson (2017). They went on further explaining the benefits, even at an early age, how music can increase focus, motivation and even memory. Even in a time where mental health awareness is so large, they share how music can lower blood pressure and decrease depression. Having these resources available to better educate myself on what students can use and need will help me become a better teacher and person.

Implications

My project has the capability to be used in multiple grade levels because of the flexibility and necessity for students to be engaged. The lesson was developed for a typical fourth grade classroom, but any of the strategies could be utilized in any upper elementary classroom as well as most lower level classrooms. For example music,

student choice, flexible seating, building relationships, and classroom climate are all very flexible engagement strategies that teachers in multiple grade levels can implement for their individual students needs. Of course each one of these could look a little different for the music choices, seating options and how a teacher would build their relationship with their students, but that is what's great about the potential. As for the technology engagement piece that would look a little more different compared to lower and upper elementary students as well as the experience the teacher has. The amount of screen time and what apps or websites that are available and or appropriate for students would be up to the teachers and school districts discretion.

Limitations

When creating this project there were a few limitations that came to mind. One example was the accessibility to some resources for certain students or schools. This is more specific when it comes to technology with student engagement. Every school might have different access to internet speeds or programs that are purchased compared to other schools. Along with this will be the familiarity that students and teachers have with certain programs or formats. Obviously teachers and students will use what they are familiar with and there are multiple similar options when it comes to technology and academic programs.

Another possible limitation could be flexible seating options schools have. As we know, finding funds to help classrooms is not easy to do and in many cases teachers need to purchase their own supplies for their classrooms. If this is the case, the flexible seating

student engagement lesson could look different with what a classroom has available, but still have success with it.

Suggestions for Ongoing Research

I have enjoyed working and researching this project overall. Before I started this I knew there was lots of information and opinions about student engagement. Teachers before me have been intrigued and trying to figure out what they can do to help support students and teachers after me will continue to do so. I think that moving forward student engagement is a subject that is ever changing and will need to be updated over time. Students of today are different from students of 10 or 20 years ago. How we engage and motivate students is important and continuing to research that will prove its worth as the years move on.

Sharing my Project

I first plan to share my project with my own classroom of students. As I get more experience with that and see how things go, this will start to branch out. I will connect with my colleagues and share with them what I have been learning and what has gone well. This way we can discuss together what we want to try and what can we adjust to fit our students best. I also plan to upload my project to Hamline University's Digital Commons. From there it will be available to any person that has a need or interest for student engagement.

Summary

My entire capstone project was focused on answering the question of *how do technology and other strategies increase student engagement?* This question came up

because of the personal experiences I have had over the past few years of me teaching elementary students. After talking with multiple co-workers about this same thing, I felt it was important to dive deeper into this question and do some strong research on how I can help support my students as well as give resources to other educators as well. Through this research I was able to build multiple lessons with multiple student engagement strategies that can be used all across the elementary grade levels. The lessons are set up for flexibility and individual needs for the students and the teachers everyday classroom.

In conclusion, this capstone project has been a great learning experience and challenge for me as an educator, researcher and writer. I have learned a lot about student engagement for my classroom as well as what it all takes to complete a capstone project in college while working a full time job. After this I will have a lot of confidence and experience to share with my students and colleagues to help make them better students and all of us stronger and more educated teachers.

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